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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Sec I 16,807

Applicant:	Yasuhiro OOTORI	
Serial No.:	09/488,448	Examiner: Cuevas, P.
Filed:	January 20, 2000	Art Unit: 2834
For:	Resistance Force Generator For Use in a Gaming Machine (as amended)	

Honorable Commissioner of
Patents and Trademarks
Washington, D.C. 20231

RESPONSE TO OFFICE ACTION

Sir:

This is in response to the Office Action of Sept. 4, 2001, in which the Examiner:

a) objected to the drawings;

b) rejected the claims under 35 U.S.C. § 112;

c) rejected Claims 1 and 12 as anticipated by U.S. Patent No. 6,004,134 to Marcus; and

d) rejected Claims 2-4,7 and 11 as obvious over Marcus in view of U.S. Patent No. 4,565,108 to Makita.

Based on the following amendments and remarks, the application is deemed to be in condition for allowance and action to that end is respectfully requested.

IN THE TITLE

Please delete the current title and insert therefore -- Resistance Force Generator for use in a Gaming Machine.--

IN THE DRAWINGS

Submitted herewith, along with a letter to the Official Draftsperson are Figures 1, 2 and 3 with the label "PRIOR ART" and additions to Figures 5, 6 and 10 as requested by the Examiner. The additions to Figures 5, 6 and include the following numerals to the drawings which are described in the specification:

-32 on Figure 5

-65 on Figure 6

-ST12 on Figure 10.

The amendments to the drawings do not constitute new matter.

CLAIMS IN "CLEAN" FORMAT

Below are amended claims 1-12 and new claims 13 and 14 written in "clean" form and found in "marked-up" form in Appendix 1 hereto:

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1. (Amended) A resistance force generator utilizing magnetism for use in a game machine for generating in accordance with game information, a resistance force corresponding to an input operation on an input operation unit of an input means that inputs information to a main unit of said game machine, comprising:

a container which accommodates a magnetic substance;

a rotation member provided inside said container and rotated based on an input operation of said operation unit; and

a magnetic field generation means for a generator which generates a magnetic field inside said container in accordance with game information.

2. (Amended) The resistance force generator according to claim 1, wherein said rotation member is arranged in a state in which part of a peripheral edge thereof is immersed in said magnetic substance when there is no magnetic field in the container for use in a game machine.

3. (Amended) The resistance force generator according to claim 1, wherein said rotation member is arranged in a state in which all of one side thereof is immersed in said magnetic substance when there is no magnetic field in said container for use in a game machine.

4. (Amended) The resistance force generator according to claim 1, wherein said rotation member has an accommodation part which accommodates said magnetic substance when a magnetic field is produced for use in a game machine.

5. (Amended) The resistance force generator according to claim 1, wherein said rotation member is of a non magnetic substance for use in a game machine.

6. (Amended) The resistance force generator according to claim 1, wherein said rotation member for use in a game machine includes rotating vanes.

7. (Amended) The resistance force generator according to claim 1, wherein said magnetic substance is a magnetic powder for use in a game machine.

8. The resistance force generator according to claim 1, wherein said magnetic substance is a magnetic fluid for use in a game machine.

9. The resistance force generator for use in said game machine according to claim 1, wherein said magnetic field generation means is an electromagnet.

10. (Amended) The resistance force generator according to claim 1, wherein said magnetic field generation means is arranged so as to collect magnetic substance on an entire region of said rotation member when a magnetic field is generated for use in a game machine.

11. (Amended) The resistance force generator according to claim 1, wherein said container has, in a part which is isolated from said rotation member, a space in which the magnetic substance collects when a magnetic field is generated for use in a game machine.

12. (Amended) A resistance force generator utilizing magnetism for generating in accordance with game information, a resistance force corresponding to an input operation on an input operation unit of an input means information to a main unit of a game machine, comprising:

a magnetic member which rotates based on the input operation of said input operation unit; and

a magnetic field generation means which generates a magnetic field toward said magnetic member in accordance with game information.

13. (New) A resistance force generator according to claim 1, wherein said rotation member is provided inside said container in contact with at least part of said magnetic substance and operationally connected with said input operation unit to rotate based on an input operation of said input operation unit; and

said magnetic field generation means generates a magnetic field to make displacement of said magnetic substance inside said container in accordance with game information, whereby the resistance force corresponding to said input operation is varied in accordance with game information.

14. (New) A resistance force generator according to claim 1, wherein said magnetic member which is operationally connected with said input operation unit to rotate based on the input operation of said input operation unit; and

said magnetic field generation means generates a magnetic field toward said magnetic member in accordance with game information, whereby the resistance for corresponding to said input operation is varied in accordance with game information.

III. THE REJECTION OF CLAIMS 1,9, and 12 UNDER 35 U.S.C.102 SHOULD BE WITHDRAWN

To address the Examiner's concerns, claim 1, 9 and 12 have been amended accordingly.

The respected Examiner has asserted that claims 1, 9, and 12 are anticipated by the Marcus patent. However, as demonstrated herein, that is not so. For instance, claim 1 of the disclosed invention specifically recites a container which accommodates a magnetic substance as well as a "magnetic field generation means which generates a magnetic field inside said container in accordance with game information." The Marcus patent, does not disclose, teach or otherwise suggest "a magnetic substance" nor "a magnetic field generation means which generates a magnetic field …in accordance with game information". Rather, the patent shows "a interactive simulation system...with a control unit...with the stored simulation rules ... ultimately connecting to a " joystick" … "with forces applied" … "by electric motor means". ('134, claim 1, Col.4, lines 58-65.)

The resistance force generator of the disclosed invention uniquely recites the elements of utilizing a "magnetic substance"…and "magnetic field generation means" within independent claim 1. Within dependent claim 9, the disclosed invention recites that the "…magnetic field

generation means is an electromagnet." Within independent claim 12 "..a magnetic member which rotates based on the input operation of said operation unit; and a magnetic field generation means which generates a magnetic field toward said magnetic member in accordance with game information." None of these elements are taught or recited by the Marcus patent nor is the desirability of these features taught. Claim 1, 9 and 12 therefore can NOT be anticipated as a matter of law.

To address the immediate concerns of the Examiner, claims 1, 9, and 12 have been amended to recite use of the novel features, amongst other features, of the gaming machine disclosed. Support is found throughout the specification and claims for the gaming machine.

Further as discussed earlier independent claim 1 has been amended to address the Examiner's concerns, dependent claims 2-4, 7 and 11, which depend from amended claim 1 and are in condition for allowance.

IV. THE REJECTION OF CLAIMS 2-4, AND 11 UNDER 35 U.S.C. § 103 SHOULD BE WITHDRAWN

The Examiner has asserted that claims 2-4, and 11 are rendered obvious by a combination of the Marcus and Makita patents. Specifically, the Examiner asserts that it would be obvious to use the electro-magnetic power clutch (1) disclosed by Makita on the resistance force generator disclosed by Marcus for magnetically coupling the magnetic substance (stator) with the rotation member (38,40) and gradually engaging or de-engaging the drive plate (5) to the system (2). However, as demonstrated herein, that is not so.

First, there is no suggestion or motivation which would lead one skilled in the art to combine the teachings of Marcus and Makita allegedly to arrive at the invention because Makita

teaches and recites specifically a "gearshift apparatus for an automobile", (col. 1, line 60) "... automobile on an ordinary road..." (col. 1, line 46); "..torque to start the automobile on an uphill and at a heavy road..." (col. 5, line 53, of Independent claim 1 and also discussed throughout claim 1 and the preamble.) Further, independent claim 6 of Makita '106 also recites "... a gearshift apparatus for an automobile"... (col. 6, line 33), "...gear..producing a sufficient torque to start the automobile...",etc. Independent claim 7 recites specifically a "gearshift apparatus for an automobile", "... (col. 6, lines 40-41), Further "...speed gear ratio ...producing a sufficient torque to start said automobile on an ordinary road....producing a sufficient torque to start the automobile..." (col. 6, lines 46-47). Marcus is directed to gearshift apparatus for an automobile and makes no mention nor teaches the novelty of a resistance force generator for use in a game machine, nor utilizing a magnetic substance, nor a magnetic field generation means as recited in claim 1 of the disclosed invention for use in a game machine.

Secondly, Marcus and Makita and the inventors herein were attempting to solve problems which are different from those solved and attempted to be solved by applicant because Makita is directed to, as in the Title, a "GEARSHIFT APPARATUS **FOR AN AUTOMOBILE"** while Marcus provides interactive stimulation via "... actuators interconnecting the joystick to the control unit..." (claim 1, col. 5, lines 4-5) which as recited in the SUMMARY OF THE INVENTION, preferred embodiment of Marcus such that the "... actuators include electric motors driving a low-friction, low-backlash transmission..." (col. 1, lines 54-55). Makita is directed to an automobile, and Makita makes no mention, nor teaches the desirable element of a resistance force generator...comprising ...a magnetic substance...or a "magnetic field generation means" (claim 1 of the present invention) to, for example, generate resistance force **in a game**

machine. Neither Marcus nor Makita teach these elements nor the desirability to combine these elements as well as other novel aspects of the disclosed invention.

Claims 2-4, and 11 have been amended to address and allay the Examiner's concerns. The claims have been amended to reflect the novel aspect of the use of the elements recited as used in a game machine.

The Examiner has asserted that claim 5 is rendered obvious by a combination of Marcus and in view of the Okita US patent 4,611,697. However, as demonstrated herein, that is not so. First, there is no suggestion or motivation which would lead one skilled in the art to combine the teachings of Marcus and Okita allegedly to arrive at the invention because Marcus teaches and recites specifically a "simulation or a game" (line 60, col. 4) while Okita is directed to a "... coupling comprising an outer rotary driving member...inner rotary driven member... said inner driven member comprising... a toroidal coil...said outer driving member comprising a cold forged cylindrical member ... " (line 54-55, col. 4, Claim 1) and the invention is directed to the goal of "...preventing (an electromagnetic coupling) from being heated to an undesirably high temperature..." (line 39-40, Col. 1, Summary of the Invention.) No mention nor teaching of "a resistance force generator **for use in a game machine**" (claim 1 of the disclosed invention) is mentioned much less of a "resistance force generator **for use in a game machine" with a "...rotation member"** Claim 5, nor the desirability to combine these two rather distinct alleged prior art implementations of an **gearshift apparatus <u>for an automobile</u>** and an **electromagnetic powder coupling <u>with cooling fins</u>** ***for use in a gaming machine*** (claim 1 of the disclosed invention).

Claim 5 has been amended to address, again, the Examiner's concerns. The claims have been amended to reflect the novel aspect of the use of the elements recited as used in a game machine, as disclosed and supported throughout the specification.

The Examiner has asserted that claim 6 is rendered obvious by a combination of the Marcus and the U.S patent No. 3,305,055 to Hoshio. However, as demonstrated herein, that is not so. First, there is no suggestion or motivation which would lead one skilled in the art to combine the teachings of Marcus and Hoshio allegedly to arrive at the disclosed invention because Hosio is directed to a suppression device for use in "A ship having an oscillation suppression device..." (claim 7, col.10, line 19 of Hoshio).

Further the detail and elements of claim 1 are distinct from the elements of the disclosed invention, for example the elements of "...a container which recites a magnetic substance..."(claim 1 of the disclosed invention) nor "...a magnetic field generation means...(also claim 1) as well as other features such as"....wherein the resistance force generator further comprises a rotation member including rotating vanes." (claim 2 of the disclosed invention.) Marcus makes no mention of, for example, a rotating vane element in the '134 patent. Respectfully, neither Marcus nor Hoshio teach the desirability of having a rotating vane element as in claim 6 of the disclosed invention. Neither teach, recite or suggest adding this element. The disclosed invention's rotation member in this instance "...including rotating vanes..." (claim 6) is utilizing a resistance force generator for use **in a game machine** (claim 1) responsive to "game information" as supported throughout the specification, and detailed description of the preferred embodiment.

Hoshio has rotating vanes directed throughout the disclosure of utility as a ship's oscillation suppression. Neither the Hoshio patent nor the Marcus patent suggests nor teaches the desirability of utilizing a rotating vane element in a game machine.

Claim 6 has been amended to address, again, the Examiner's concerns. Claim 6 has been amended to reflect the novel aspect of the use of the rotating vane element as used in a game machine, as supported throughout the specification of the immediate disclosure.

The Examiner has asserted that Claims 8 and 10 are rendered obvious by a combination of the '134 patent to Marcus and U.S. Patent No. 3,305,055 to C.S. Slaughter. However, as demonstrated herein, that is not so.

First, there is no suggestion or motivation which would lead one skilled in the art to combine the teachings of Marcus and Slaughter allegedly to arrive at the invention because Slaughter is directed at a "...brake and clutch..." (col. 7, line 55 of Claim 1, Slaughter) used for example in "...electronic tape equipment..." (col. 1, line 12, Slaughter.).

Respectfully, claims 8 and 10 have been amended to address all of the Examiners claims, reciting the novel aspect of utilizing the magnetic substance and magnetic field generation means is used in a gaming machine as supported by the specification throughout.

CONCLUSION

In view of the above, independent claims 1 and12 are allowable for the above reasons as well as new claims 13-14. Each remaining dependent claim 2-11 is dependent directly or indirectly on independent claim 1 and are therefore also allowable for the reasons stated above and for other reasons as well.

In view of the foregoing, therefore, the subject application is now believed to be in full condition for allowance. Accordingly, it is respectfully requested that the Examiner's rejections be withdrawn; and that claims 1- 14 be allowed in their present form.

Respectfully submitted,

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DATE: December 4, 2001
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